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ABSTRACT

The National Education Longitudinal Studies (NELS) program is a long-term effort that now encompasses the educational experience of youth from three decades, the 1970s, 1980s, and 1990s. The NELS program studies the educational, vocational, and personal development of students at various grade levels, and the personal, familial, social, institutional, and cultural factors that may affect that development. The NELS program currently consists of three major studies: (1) the National Longitudinal Study of the High School Class of 1972 (NLS-72); (2) High School and Beyond (HS&B); and (3) the National Education Longitudinal Study of 1988 (NELS:88). This monograph discusses opportunities for drawing comparisons across the cohorts that comprise the three studies, as well as some of the differences in survey content and design that may limit the possibilities of drawing valid comparisons. The focus is on high school transcripts. When transcript information is coupled with other data about students, it permits the specification of complex models of educational processes and the measurement of high school program and course effects on post-high school outcomes. Comparison of transcript information among the three studies means attention to issues of content comparability and sample design. Content comparability is discussed in the "crosswalks" that form the final section of this report, and design comparability is discussed in some detail. Some other difference of note among the studies are discussed, but their general designs were quite similar. The attached crosswalks cover student-level and course-level comparisons. (Contains 4 tables and 19 references.) (SLD)

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National Education Longitudinal Study of 1988:

Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data

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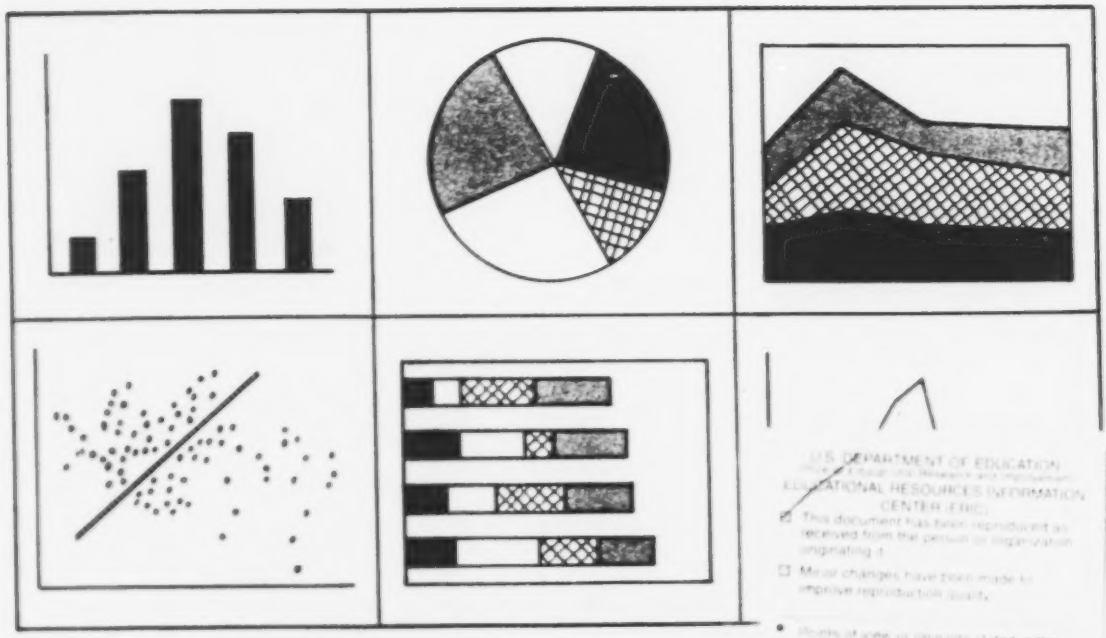

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Working Paper No. 95-06

January 1995

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January 1995

Foreword

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The ***Working Paper Series*** was created in order to preserve the valuable information contained in these documents and to promote the sharing of valuable work experience and knowledge. However, these documents were prepared under different formats and did not undergo vigorous NCES publication review and editing prior to their inclusion in the series. Consequently, we encourage users of the series to consult the individual authors for citations.

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National Education Longitudinal Study of 1988:

Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data

Prepared for

National Center for Education Statistics
U.S. Department of Education
Washington, DC

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CROSSWALK FOR 1992 NELS:88, 1987 AND 1990 NAEP, AND 1982 HS&B
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Preface

The NCES National Education Longitudinal Studies (NELS) program is a long-term effort that now encompasses the educational experience of youth from three decades -- the 1970s, 1980s, and 1990s. The general aim of the NELS program is to study the educational, vocational, and personal development of students at various grade levels, and the personal, familial, social, institutional, and cultural factors that may affect that development. The NELS program currently consists of three major studies: the National Longitudinal Study of the High School Class of 1972 (NLS-72); High School and Beyond of 1980 (HS&B of 1980); and the National Education Longitudinal Study of 1988 (NELS:88). While some school records data were collected by NLS-72, two of the NELS series--HS&B in 1982 and NELS:88 in 1992--include very specialized academic transcript data bases, that permit determinants, patterns, and consequences of course taking to be deeply explored. Transcripts were collected for 15,941 members of the HS&B 1980 sophomore cohort in the fall of 1982, and for 17,285 NELS:88 sample members in the fall of 1992.

Also housed in NCES, the National Assessment of Educational Progress (NAEP) is a federally-funded, on-going periodic assessment of educational achievement in the various subject areas and disciplines taught in the nation's schools. Since 1969, NAEP has gathered information about levels of educational achievement of 9-, 13-, and 17-year olds across the country. In the autumn of 1987, high school transcripts were collected from 34,140 students who, in 1985-86, were enrolled in the 11th grade and/or were 17 years old. These students attended 433 schools that had been sampled for NAEP in 1986. In the spring of 1991, high school transcripts were collected from 21,589 students who had graduated from the 1990 NAEP sample of 330 schools.

These transcript studies permit course taking data to be linked to longitudinal questionnaire and test data in the case of HS&B and NELS:88, and to be linked to national assessment data in the case of the 1987 and 1990 NAEP studies. These linkages provide a means for assessing the relationship between course work and such learning outcomes as increased competence and knowledge. However, these four transcript studies also provide a basis for investigating changes in the pattern of course taking over time, as well as changes in enrollment associated with various student characteristics. In particular, such trend data permit analysts to investigate the impact of the curricular reforms of the 1980s, which stressed the need for major changes in program enrollment and graduation requirements in order to enhance the exposure of all students to essential materials and learning processes.

This monograph provides information that will assist researchers in designing comparative analyses of these four rich NCES transcript data bases.

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Karen Sutherlin of NORC assisted in the final processing of this manuscript. Steven Ingels is the Project Director for the NELS:88 Second Follow-up; Katy Dowd was the Project Manager for the Transcript Components of the Second Follow-up. Peggy Quinn is the NCES Project Officer.

Conducting cross-cohort comparisons using HS&B, NAEP, and NELS:88 academic transcript data

The High School Transcript Studies. The immense value of school transcripts as objective, reliable measures of crucial aspects of students' educational experiences is widely recognized. With respect to level of detail, accuracy, and completeness, transcript data are vastly superior to student self-reports of exposure to learning situations.[1] When coupled with data on students' family backgrounds and demographic characteristics, school environments, and standardized competence and outcome measures,[2] they permit the specification of complex models of educational processes. Moreover, transcript components of longitudinal studies such as HS&B and NELS:88 permit the measurement of high school program and course effects on post-high school outcomes.

Transcripts also provide indicator data for measuring national education trends. Of particular interest are changes in course taking and trends associated with grading practices and program placement and participation. NELS:88 and other NCES studies supply archival data on these topics. These studies include the National Longitudinal Study of the High School Class of 1972 (NLS-72), the sophomore cohort component of High School and Beyond (HS&B), and records studies of the high school careers of 1987 and 1990 graduating seniors conducted as part of the National Assessment of Educational Progress. Some additional secondary transcript studies have been carried out as well.[3]

Although a separate transcript study was not conducted as part of NLS-72, school records data were collected. School administrators were asked to supply data on each NLS-72 senior's high school grade average, college admission test scores (SAT, ACT), courses taken, and major course of study.

HS&B, the NAEP High School Transcript studies, and NELS:88--unlike NLS-72--are characterized by a formal school records component in which courses have been coded using the successive versions of the Classification of Secondary School Courses (CSSC). These data sets have been designed to serve a number of purposes, including trend comparison. In order to properly compare data across these studies, however, analysts must be sensitive to points of difference that may affect comparisons. In addition to issues of content comparability, there are issues of sample design comparability. Content comparability is addressed in the crosswalk which appears as the final section of this monograph. Design comparability is discussed below, followed by a bibliography of sources of information on the transcript studies.

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1 See, for example, Fetters, Stowe and Owings (1984) for a comparison of self-report and transcript data, drawn from High School and Beyond.

2 HS&B and NELS:88 transcript data are directly linkable to individual student test scores, questionnaire data, and contextual data sources such as teacher, parent, and school administrator reports, at multiple points in time. NAEP transcripts can be linked to NAEP public use assessment results, as well as to school questionnaire and school course offerings data.

3 Educational Testing Service collected course completion data in the Study of Academic Prediction and Growth in 1969. Private school students were not included nor was this a national probability sample of public high school graduates; however, the study is thought to give reasonable public school estimates. The Bureau of Labor Statistics National Longitudinal Survey of Labor Force Experience--Youth Cohort (NLSY), with sponsorship from the National Center for Research in Vocational Education, collected secondary school academic transcripts in three waves from 1980-83 for its sample of youths who were aged 14-21 in 1979; see *NLS Handbook 1992*, p. 138, p.147. Further information on both studies is given in Tuma, Gifford, Horn and Hoachlander (1989).

Sample Comparability Across NCES High School Transcript Studies. The overall sample design for HS&B, NAEP, and NELS:88 is quite similar. All are large, nationally representative school-based samples that have employed a multistage, stratified, clustered design. Despite their fundamental similarity, the designs differ somewhat in a number of features. Five differences should be noted because of their potential impact on the matter, the manner, or the possibility of comparative analysis:

- *school and student oversampling*:
  different rare student populations and school types have been disproportionately included in the studies;

- *eligibility*:
  who was included or excluded;

- *representativeness*:
  what cross-sectional and longitudinal populations the sample represents;

- *sample sizes*;

- *record completeness*.

Oversampling. Rare populations of high policy (or, as in the case of twins, methodological) interest were oversampled in some of the transcript studies. This factor, along with differences in overall sample size, mean that the number of cases available for analysis of rare populations may vary by a good deal across the studies. The 1987 NAEP high school transcript study oversampled handicapped students. Non-sampled co-twins of HS&B sampled twins were included in the transcripts component of the study. HS&B oversampled Hispanics; NELS:88 oversampled Asians and Hispanics[4]; NAEP oversamples schools with high percentages of Hispanics and blacks. Private school students were oversampled in both HS&B and NELS:88, though the HS&B sample of non-Catholic private schools was comparatively small (31 non-Catholic private schools are included in the HS&B transcript study). Private school oversampling is also a feature of NAEP.

Eligibility. Potential undercoverage biases resulting from sample exclusion are summarized in Table 1. "Undercoverage" here refers to systematic undercoverage stemming from deliberate exclusion of certain categories of students from a sample--such as physically or mentally disabled students or non-English speakers, who might find it difficult or impossible to complete demanding cognitive tests and questionnaires. There are other potential sources of undercoverage as well, such as incomplete sampling frame data (no national listing of schools is, or remains for very long, 100 percent complete and accurate) or omissions and errors in school rosters.[5]

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[4] Oversampling of Hispanics was somewhat differently implemented in HS&B and NELS:88. In HS&B, primarily in order to bolster the representation of Cuban and Puerto Rican Hispanic subgroups, a number of schools were added that had high Hispanic enrollments. In NELS:88, Hispanic (and Asian) students were selected at a higher rate from within the regular base year school sample.

[5] These other sources of undercoverage are thought to have only a very small impact on estimates; exclusion of students with physical, mental or linguistic barriers to assessment or survey participation is thought to be the most serious potential source of undercoverage bias for studies such as HS&B, NELS:88 and NAEP.

Table 1: Student sample exclusion and transcript undercoverage

Study	Undercoverage	Affected Groups[6]
HS&B 1982	unknown	language barrier severe physical or mental disability
NAEP 1987	none	
NAEP 1990	none	
NELS:88 1992		
Senior Cohort	negligible	
G8, G10 Cohorts	2.5%[7]	language barrier severe physical or mental disability

HS&B, NAEP, and NELS:88 have excluded students with severe mental, physical, or linguistic obstacles to completing survey forms. While all three studies have used similar exclusion criteria, specific guidelines differ somewhat across (as well as, over time, within) the studies. In an effort to minimize the number of exclusions, eligibility criteria were modified (in large part, by being made more specific) starting with both the 1990 NAEP and 1990 NELS:88.

Both NAEP and NELS:88 collect data on the characteristics of excluded students so that undercoverage bias can be quantified; detailed exclusion documentation is not available for HS&B. However, given the general similarity of eligibility rules for HS&B, NAEP, and NELS:88, one may presume on the basis of the NAEP and NELS:88 experience at the upper grade levels that HS&B base year exclusion rates were between 3 and 6 percent. Both NAEP and NELS:88 have been more inclusive in their transcript studies than in test or questionnaire administration. In NELS:88, all base year ineligible students who were seniors in the spring term of the 1992 school year were included in the transcript study. In the 1987 NAEP transcript study, the sample included (1) sample selections in the 1986 NAEP assessment, plus (2) students who were sampled for the assessment but deliberately excluded from it, and (3) all handicapped students attending schools selected for the assessment. Thus categories of students such as the handicapped, who were disproportionately excluded from the testing sample, were disproportionately selected (oversampled) for the transcript components, and additional information

[6] The distribution of these classifications in the school population may be the source of additional subgroup biases. For example, base year ineligibles differ from the eligible sample in terms of race/ethnicity (for example, disproportionate numbers of Hispanics), gender (disproportionate numbers of males), and behavioral characteristics, (for example, a much higher dropout rate).

[7] In the base year, 5.4% of the potential sample was excluded (since some excluded students proved, upon investigation, not to have been 1987-88 eighth graders, the apparent 5.4% rate in fact slightly overstates the proportion excluded). By the time of the second follow-up transcripts study in 1992, over half of the excluded students had been reclassified as eligible for NELS:88.

collected about these students' disabilities. Inclusion of NAEP test-excluded students in the transcript studies also provides representation for language barrier ineligibles. The 1990 high school transcript study requested transcripts for both NAEP participating and nonparticipating NAEP sample members and excluded students (4.2 percent of seniors were excluded from the 1990 NAEP testing sample for reasons of mental, physical, or linguistic barriers to participation).

While the NELS:88 transcript component provides extended coverage of the population of eligible and ineligible 1992 seniors, there is some sample undercoverage of the eighth and tenth grade cohorts, as documented in Chapter 3 of the student component data file users manual. Participation in special education or bilingual education is specifically noted in the NELS:88 transcript data (flag F2RSPFLG); English as a Second Language courses have distinct CSSC codes.

A more difficult case is the HS&B transcript study, insofar as undercoverage in HS&B – primarily of handicapped students, secondarily of students with limited English language proficiency–is not well documented. (For example, unknown numbers of handicapped students were excluded; others were included, but not identified as handicapped in a way comparable to the NAEP procedure[8]). It may therefore be useful to provide an example to show how the HS&B secondary transcripts data can be manipulated to facilitate comparisons with NAEP for this category of students. Hoachlander dealt with the comparability problem in the following way (see Hoachlander, 1991). A fraction of handicapped students is included in HS&B; another fraction is excluded, usually those with more severe handicaps. Because the HS&B transcript study contains records for dropouts and repeating students who did not graduate with their classmates and whose transcripts were therefore incomplete, Hoachlander limited comparison to high school graduates. A second condition was set as well–comparison students must have completed between 16 and 32 total Carnegie Units. Hoachlander remarks:

> These sample restriction rules also had the advantage of eliminating most of the moderately and severely handicapped graduates from the NAEP sample. When we examined the disabilities of the handicapped students remaining in the NAEP sample after the imposition of these rules, we found most of them to be only mildly learning disabled, mildly emotionally disabled, or mildly retarded. Given the rigor of the HS&B questionnaire, these are the kinds of disabled students who would most likely have been selected to participate yet not identified as handicapped. Altogether, the handicapped students remaining in the NAEP sample after the imposition of the sample restrictions accounted for about 3 percent of the total population of graduates. This approach to making the samples consistent proved to be a simple solution to the problems posed by the inclusion of handicapped students in HS&B without their having been identified as such.

For the 1982-1990 tabulations of credits earned (Legum et al., 1993), analysis was restricted to NAEP transcripts sample members who had not participated in special education programs.

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[8] HS&B provided for questionnaire self-identification of handicapped students; in NELS:88, eligible students with disabilities were identified (in the base year, hence for the eighth grade cohort only) by parents, while schools identified handicapped students who were ineligible to participate. In the NAEP High School Transcript Studies, handicapped students were defined as those for whom the school had on file a special education IEP (Individualized Educational Program). HS&B student self-reports of handicap status were not highly stable over time (see Owings and Stocking, 1985). Transcript data on participation in special education programs serves as an additional identifier of handicap status (4.3% of the NELS:88 sample participated in special education programs, according to their transcripts, and 1.6% in bilingual education). For the NELS:88 transcripts component, special education courses were coded in conformity with the specifications of the 1987 and 1990 transcripts studies, which were more detailed than those of HS&B, though without a seventh-digit code extension (see 4.4.2 of the *NELS:88 Second Follow-Up Transcript Component Data File User's Manual*).

Representative Populations. There are four basic questions to be asked about the NCES academic transcript studies in terms of their degree of representativeness of various national populations.

These questions are:

1) Was the school sample nationally representative?

2) Is the within-school student sample representative of an age or grade cohort within the school?

3) Was the student sample nationally representative?

4) Of what was it representative?

We shall answer each of these questions in turn.

1) Was the school sample nationally representative? HS&B and the NAEP transcript studies were based on national probability samples of high schools. The *HS&B* school sample is representative of the nation's high schools in 1980. Technically it is not representative of the nation's schools in 1982 since new high schools came into existence and some 1980 schools merged and closed. Given the low rate of such change over a two year period, the 1982 HS&B schools are a close approximation of a national probability sample of schools. It should also be remembered that transcripts are inherently longitudinal--they span the several years of the high school career from 1979 or 1980 to 1982. Hence the HS&B transcript study may best be described as a collection of the high school records of a representative sample of the nation's 1980 sophomores from within a nationally representative sample of 1980 high schools.

The *1987 NAEP transcripts* are based on the nationally representative school sample of the 1986 NAEP. This point of perfect school representativeness falls midway in the transcript record, with the 1986 sample a good approximation to the nation's schools in 1985 or 1987. The *1990 NAEP transcript study* is a nationally representative sample of schools derived from the 1990 NAEP sample. However, while the NAEP sample frame included all schools teaching grade 12 or having 17-year-old students (that is, individuals born in 1972) in the 1989-90 school year, the transcript study was restricted to schools with twelfth grades.

The *NELS:88* high school sample is not nationally representative. It represents the schools to which a national probability sample of eighth graders had dispersed two and four years later.

2) Is the within-school student sample representative of an age or grade cohort within the school? The *HS&B* sample is fully representative of sophomores in the HS&B school in the spring term of the 1979-80 school year. It not fully representative thereafter, because transfers into the school had no chance of selection into the HS&B follow-up sample. (Though transfers into HS&B schools are not represented in the 1982 survey, HS&B maintained a representative student sample overall by following transfers out of the HS&B schools.)

The *1987 high school transcript* sample originated in a within-school representative sample of the school's juniors/17-year-olds (that is, students born between October 1, 1968 and September 30, 1969). However, subsequent transfers into the school were given no chance of selection into the study; this fact qualifies the representativeness of the within-school sample of the graduating class of 1987.

The *1990 high school transcript* sample originated within the 1990 NAEP sample of seniors/17-year-olds, but is further restricted to the grade cohort of seniors who in fact graduated in calendar 1990. As such it provides a representative sample of each high school's 1990 graduates.

NELS:88 in-school samples are not necessarily representative of seniors or graduating seniors within the NELS:88 schools, since, among other reasons, non-NELS:88 eighth grades as well as NELS:88 eighth grades may have fed the school.

3) Was the student sample nationally representative? All four studies provide nationally representative samples of public and private school students. However, there are some differences in the precise populations that are represented, as detailed in 4) below.

4) Of what was it representative? Table 2 summarizes the analysis populations associated with the various transcripts samples:

Table 2: Analysis populations for transcript studies

Study:	The high school careers of population:
HS&B 1982	the nation's 1980 sophomores
NAEP 1987	1985-1986 juniors who remained in their 1985-86 schools and graduated in academic year 1986-1987
NAEP 1990	graduating seniors in calendar 1990
NELS:88 1992	1. seniors in spring term 1992 2. graduating seniors in the 1991-92 academic year 3. the 1990 sophomore cohort 4. the 1988 eighth-grade cohort

HS&B is a nationally representative sample of 1980 sophomores, and of the 1980 sophomore cohort two years later (in 1982) when the HS&B transcript survey was conducted for a subsample of the sophomore cohort. Technically, the study imperfectly represents the nation's 1982 graduating seniors, since 1982 seniors who were not sophomores in 1980 are not represented in the sample. However, analysts can make adjustments for unrepresented seniors by modeling the characteristics of high school graduates who take more than the standard four (or three) years to complete.

The *1987 High School Transcript Study* represents an augmented sample of participants in the 1986 NAEP who were enrolled in the 11th grade and/or were 17 years old and who successfully completed their graduation requirements prior to fall 1987. While this sample is dominantly 1985-86 juniors, no attempt was made to follow individuals who left the school through transfer or dropping out, nor were juniors/seniors who transferred into the school after NAEP sampling included. In addition,

1987 graduating seniors who were not 1986 juniors had no chance of selection into the study. This sample therefore only approximates the high school graduating class of 1987.

The *1990 High School Transcript Study* is a representative sample of graduating seniors from the NAEP sample (participants, nonparticipants, and excluded students) in twelfth grade in the 1989-90 school year. As in the 1987 study, students who transferred out, failed to graduate on time, or who received GEDs, were excluded.

The *NELS:88 transcript survey* represents several populations. *First*, it represents the nation's high school seniors in the spring term of 1992. To make comparisons, say to the NAEP 1990 sample, one must select only those NELS:88 senior cohort members who in fact graduated from high school with their class.

Second, the NELS:88 transcript survey represents the nation's 1990 sophomores two years later. The sophomore cohort two years later includes both students and dropouts. NELS:88 transcript data can also be used cross-sectionally by generalizing about the sophomore cohort in spring term 1990 using transcripts data from the 1989-90 school year.

Third, the NELS:88 transcript survey represents the nation's 1988 eighth graders four years later. Again, this population includes dropouts, early graduates, students who graduated in 1992, and students who failed to graduate with their class.

For purposes of intercohort comparison, however, analysis populations of interest are likely to be somewhat more limited. Table 3 indicates principal cross-cohort comparisons employing NELS:88, HS&B, and NAEP (1987 and 1990) high school transcripts.

Sample Sizes. There are differences in sample sizes across the studies, and marked differences in the distribution of transcripts-eligible students across schools. For example, HS&B collected 15,941 transcripts from 1,720 schools.[9] In contrast, the NAEP 1987 study collected more than twice as many transcripts (over 34,000) from a quarter as many schools (433). For the four academic transcript studies, numbers of schools providing data and numbers of transcripts obtained are summarized in Table 4.

Completeness of the High School Record. The longitudinal studies (HS&B, NELS:88) followed a pre-senior cohort, collecting transcripts at the point at which sample members in modal grade progression had just completed their senior year. A fundamental difference between the HS&B and NELS:88 transcript studies and the NAEP high school transcript studies is that in the 1987 and 1990 NAEP records collections, transcripts of students who were still enrolled in school, dropouts, transfers, and individuals who received GEDs were excluded from the study, while in HS&B and NELS:88 they were included.

Owing to the fact that some HS&B and NELS:88 sample members had fallen behind the modal sequence for their cohort, and that others had dropped out of school, school records for these individuals necessarily span less than a full high school career (for NELS:88, senior year transcripts are available for 14,789 of the 17,285 transcript participants). The tendency to take more than four years to complete high school (or to drop out) is not randomly distributed, but rather, is associated with specific

[9] The target sample comprised 18,427 members of the sophomore cohort in 1,899 schools (the HS&B regular sample of about 1,000 schools, plus another 900 schools to which sophomores had transferred since the 1980 base year).

Table 3: NELS:88 cross-cohort transcripts analysis populations

Comparisons	Special Notes
Sophomore Cohort (1980, 1990) Two Years Later	1. Includes dropouts and students. 2. All 1982 HS&B sample members were 1980 sophomores; for NELS:88, select using G10COHRT flag. 3. To determine NELS:88 dropouts, use F2DOSTAT.[10] To determine HS&B *questionnaire-defined* dropouts, use FUSTTYPE. FUSTTYPE=2 includes dropouts receiving no instruction and individuals in non-diploma alternative instruction and is equivalent to F2DOSTAT=3, 4, 5. To remove GED/alternative students from NELS:88 do not invoke F2DOSTAT=3; to remove the GED group from HS&B requires further manipulation of HS&B variables not on the transcripts file (see Ingels & Dowd 1994 or dropout component user manual).
High School Careers of Graduating Seniors (1982, 1987, 1990, 1992)	1. Compare all or any combination. 2. 1987 sample is of 1986 juniors who graduated in 1987; 1982 sample is 1980 1982 sample is 1980 sophomores who graduated in 1982; for NELS:88, determine graduating seniors through F2RTROUT; for HS&B use RESNLEFT in conjunction with YEARLEFT; for 1987 NAEP, employ the variable EXSTAT. NAEP 1990 files contain graduating seniors only.

[10] For HS&B, FUSTTYPE, and for NELS:88, F2DOSTAT, were imported into the transcript file from the student and dropout questionnaire files. F2DOSTAT characterizes the status of both participants and nonparticipants. Transcript data are missing for some dropout questionnaire completers, and transcript data are available for some dropout survey nonparticipants. In addition, there are some cases of disagreement between transcript-reported outcomes and F2DOSTAT. (An additional indicator, F2TRSTYP, attempts to elucidate contradictions between transcript- and survey-defined enrollment status where such inconsistencies are merely apparent, and to force resolution of cases where inconsistencies between sources cannot be resolved on the basis of the information available from this survey wave [of course, relevant further information may be collected in the third follow-up]). Finally, 87 individuals appear on the transcript file with an imputed spring term 1992 dropout status (left school, receiving no alternative instruction and have not received equivalency certification); these individuals were survey nonparticipants and were therefore not weighted as dropouts for purposes of a final weight in the student and dropout components, but do have a transcript weight. In order to generate precise spring term 1992 dropout population estimates using F2TRSCWT, it is therefore necessary to employ F2WTSTAT to identify dropouts. The definitional mapping between F2WTSTAT and F2DOSTAT is: F2WTSTAT 3 = F2DOSTAT 3, 4, or 5. For a full accounting in accordance with student survey enrollment dispositions for the transcript file, see the universe variable F2UNIV2D; for transcript-reported dropout status see F2RTROUT or F2RREASL.

Table 4: Participating school and student *N*s for HS&B, NAEP, and NELS:88 high school transcript studies

	STUDENTS	SCHOOLS	AVERAGE *N* PER SCHOOL
HS&B:	15,941	1720	9.3
NAEP 1987:	34,140	433	78.8
NAEP 1990:	21,531	330	65.2
NELS:88:	17,285	1543	11.2

sociodemographic characteristics, hence a potential source of bias, particularly for certain kinds of subgroup investigations.[11]

Another source of incomplete school records in HS&B and NELS:88 arises from the fact that longitudinal cohort members often changed schools between the time they entered high school and the autumn 1992 transcripts data collection. While every attempt was made to collect transcripts from all secondary schools an individual had attended, both HS&B and NELS:88 experienced lower cooperation rates from the high schools that were not part of their regular sample, with the result that transcripts for transfer students are more likely to be incomplete than collections based on graduating seniors.

Other Differences of Note

Course Offerings File. For HS&B and the 1987 and 1990 NAEP studies, course titles and their CSSC codes for all offerings recorded in the school's course catalogue are available in a separate data file that can be used in conjunction with transcript data. For NELS:88, a course offerings file is in preparation for a subset of the NELS:88 1990-92 schools that are part of the School Effectiveness Study. There will also be a separate transcripts file for the NELS:88 School Effectiveness Study. For this component, students were added to a subsample of urban and suburban NELS:88 schools in the 30 largest MSAs, to provide representative and robust within-school student samples, for the study of school effects. A weight will be available for School Effectiveness Study schools.

Definition of a Senior. There is a difference between comparing seniors in a given academic year, and comparing graduates in that year. NLS-72, HS&B in 1980, and NELS:88 in 1992 provide senior cohorts, not all members of which succeeded in meeting graduation requirements. There is also a difference between looking at graduates within an academic year (say 1989-90 or 1991-92) and within a calendar year. Some of these differences may need to be taken into account in comparative analyses. The transcripts data sets generally provide information about both the date and the reason for leaving the school so that commonality of unit of analysis--for example, graduates as of a certain time point--can be maintained.

[11] For example, Hayward and Thorne (1990) report that only 68 percent of disabled (compared to 87 percent of nondisabled) students graduate on time.

Identification of Seniors and of Graduating Seniors. In HS&B, the 1980 sophomore cohort was not freshened to create a representative 1982 senior cohort; moreover, dropouts and non-seniors are included on the transcripts files. However, students were asked on the student questionnaire what grade they were in, and course-taking histories appear in the transcripts. Graduating seniors (12,738 of the 15,941 transcripts cases) can be identified by the "reason left school" variable on the transcripts file; date of separation from the school is also provided ("month left" and "year left" are provided). NELS:88 defined the senior cohort as all students enrolled in twelfth grade in the spring term of the 1992 school year; a special flag marks members of the senior cohort. Some members of the senior class fail to graduate. As in HS&B, these individuals can usually be identified in the transcripts file, which includes a "transcript-indicated outcome" variable (F2RTROUT) that differentiates between dropouts, individuals who are still enrolled, and spring 1992, other 1992, and pre-1992 graduates. NELS:88 mailed transcripts requests in mid-August, 1992. Although numbers of late year graduates are usually quite small, given the data collection schedule, graduation information may have been missed for some NELS:88 sample members graduating in the last quarter of calendar 1992. The HS&B transcript study was conducted within a similar time frame and limitations.

Seniors were not, technically speaking, the focus of the 1987 NAEP study, for which the population of interest was students enrolled in 11th grade and/or 17 years old in the 1985-86 school year who had remained in their schools for the 1986-87 school year and had become part of the high school graduating class of 1987. Transcripts were collected in October and November of 1987. Student exit status is provided on the file.

The 1990 NAEP sample was specifically limited to graduating seniors--a senior was defined as anyone graduating between January 1 and December 31, 1990 (data were not collected until 1991). The 1990 transcript files also give month of graduation; only a handful of cases (16) occur in the last quarter of the year--these may be excluded for comparative purposes if the analyst so wishes, although such a small number of cases is likely to have but a trivial impact on results.

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CROSSWALK FOR 1992 NELS:88, 1987 AND 1990 NAEP, AND 1982 HS&B TRANSCRIPT VARIABLES

The table below lists all 1992 NELS:88 student and course-level transcript variables, including transcript-derived composite variables. Non-transcript composite variables included on the student file and identificatory items (e.g., student ID) are not included. In the right hand columns, the names of comparable variables included on 1990 and 1987 NAEP and 1982 HS&B transcript study files are provided. A shaded cell indicates that a comparable variable was not included on the files for the particular study. Some variables listed are only partially comparable, and analysts should carefully assess the differences in relation to their research question(s). A few 1992 NELS:88 variables superficially resemble variables included in previous transcript studies, but are not comparable to those items; such cases are footnoted.

STUDENT-LEVEL ITEMS

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RAB88[1]	NUMBER OF DAYS ABSENT DURING 88-89 SCHOOL YEAR	ABS09		DAYABYR1
F2RAB89	NUMBER OF DAYS ABSENT DURING 89-90 SCHOOL YEAR	ABS10		DAYABYR2
F2RAB90	NUMBER OF DAYS ABSENT DURING 90-91 SCHOOL YEAR	ABS11		DAYABYR3
F2RAB91	NUMBER OF DAYS ABSENT DURING 91-92 SCHOOL YEAR	ABS12		DAYABYR4
F2RSPFLG	PARTICIPATION IN SPECIALIZED COURSES OR PROGRAMS.	HCFLAG[2]	HCFLAG	ENROLLED
F2RRANK	CLASS RANK FOR LAST YEAR ATTENDED	CLRANK		CLASRANK
F2RCSIZE	CLASS SIZE FOR LAST YEAR ATTENDED	CLSIZE		CLASSIZE
F2RDTLMO	MONTH STUDENT LEFT SCHOOL	GRADMO		MONLEFT
F2RDTLYR	YEAR STUDENT LEFT SCHOOL	GRADDY		YEARLEFT

[1] Note that in the 1992 NELS:88 transcript study, school years are specified for absenteeism. The 1990 NAEP study provides absence information by grade level, while the 1982 HS&B transcript file reports absenteeism by year of high school.

[2] The 1987 and 1990 NAEP variable HCFLAG indicates whether the student was enrolled in a special education program. The 1992 NELS:88 item F2RSPFLG and the equivalent 1982 HS&B item (ENROLLED) indicate enrollment in special, gifted, or bilingual education courses or programs.

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RREASL	REASON STUDENT LEFT SCHOOL	EXSTAT	EXSTAT	RESNLEFT
F2RRLVRB	VERBATIM OTHER REASON FOR LEAVING SCHOOL			
F2RGPA	CUMULATIVE GPA FOR LAST YEAR ATTENDED	GPA		GPA
F2RPSATM	PRELIMINARY SCHOLASTIC APTITUDE TEST (MATHEMATICS)			PSATM
F2RPSATV	PRELIMINARY SCHOLASTIC APTITUDE TEST (VERBAL)			PSATV
F2RSATM	SCHOLASTIC APTITUDE TEST (MATHEMATICS)			SATM
F2RSATV	SCHOLASTIC APTITUDE TEST (VERBAL)			SATV
F2RACTC[3]	AMERICAN COLLEGE TEST (COMPOSITE SCORE)			
F2RACTE	AMERICAN COLLEGE TEST (ENGLISH SCORE)			
F2RACTM	AMERICAN COLLEGE TEST (MATH SCORE)			
F2RACTR	AMERICAN COLLEGE TEST (READING SCORE)			
F2RACTS	AMERICAN COLLEGE TEST (SCIENCE REASONING SCORE)			
F2RAPBIO[4]	ADVANCED PLACEMENT TEST SCORE - BIOLOGY			APTEXM10
F2RAPCHE	ADVANCED PLACEMENT TEST SCORE - CHEMISTRY			APTEXM11
F2RAPCGP	ADVANCED PLACEMENT TEST SCORE - COMPARATIVE GOVERNMENT AND POLITICS			
F2RAPCSA	ADVANCED PLACEMENT TEST SCORE - COMPUTER SCIENCE A			

[3] ACT scores were collected in the 1982 HS&B transcript study. However, modifications to the American College Test in the intervening years render the HS&B items not strictly comparable to the NELS:88 items.

[4] Several additional AP tests have been created since the 1982 HS&B transcript study. One test offered in 1982, in German literature, was not offered in 1992.

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RAPCSB	ADVANCED PLACEMENT TEST SCORE - COMPUTER SCIENCE AB			
F2RAPLIT	ADVANCED PLACEMENT TEST SCORE - ENGLISH LITERATURE AND COMPOSITION			APTEXAM4
F2RAPLAN	ADVANCED PLACEMENT TEST SCORE - ENGLISH LANGUAGE AND COMPOSITION			APTEXAM5
F2RAPEUH	ADVANCED PLACEMENT TEST SCORE - EUROPEAN HISTORY			APTEXAM7
F2RAPFLA	ADVANCED PLACEMENT TEST SCORE - FRENCH LANGUAGE			APTEXM15
F2RAPFLI	ADVANCED PLACEMENT TEST SCORE - FRENCH LITERATURE			APTEXM16
F2RAPGER	ADVANCED PLACEMENT TEST SCORE - GERMAN LANGUAGE			APTEXM19
F2RAPHAR	ADVANCED PLACEMENT TEST SCORE - HISTORY OF ARTS			APTEXM23
F2RAPLCA	ADVANCED PLACEMENT TEST SCORE - LATIN/CATULLUS - HORACE			APTEXM22
F2RAPLVE	ADVANCED PLACEMENT TEST SCORE - LATIN/VIRGIL			APTEXM21
F2RAPMAC	ADVANCED PLACEMENT TEST SCORE - MACROECONOMICS			
F2RAPCAB	ADVANCED PLACEMENT TEST SCORE - MATHEMATICS - CALCULUS BC			APTEXAM9
F2RAPCAA	ADVANCED PLACEMENT TEST SCORE - MATHEMATICS - CALCULUS AB			APTEXAM8
F2RAPMIC	ADVANCED PLACEMENT TEST SCORE - MICROECONOMICS			
F2RAPMLL	ADVANCED PLACEMENT TEST SCORE - MUSIC LISTENING AND LITERATURE			APTEXM26
F2RAPMT	ADVANCED PLACEMENT TEST SCORE - MUSIC THEORY			APTEXM27
F2RAPPB	ADVANCED PLACEMENT TEST SCORE - PHYSICS B			APTEXM12

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RAPPCE	ADVANCED PLACEMENT TEST SCORE - PHYSICS C - E & M			APTEXM14
F2RAPPCM	ADVANCED PLACEMENT TEST SCORE - PHYSICS C - MECHANICS			APTEXM13
F2RAPPSY	ADVANCED PLACEMENT TEST SCORE - PSYCHOLOGY			
F2RAPSLA	ADVANCED PLACEMENT TEST SCORE - SPANISH LANGUAGE			APTEXM17
F2RAPSLI	ADVANCED PLACEMENT TEST SCORE - SPANISH LITERATURE			APTEXM18
F2RAPSAG	ADVANCED PLACEMENT TEST SCORE - STUDIO ART - GENERAL			APTEXM24
F2RAPSAD	ADVANCED PLACEMENT TEST SCORE - STUDIO ART - DRAWING			APTEXM25
F2RAPUSG	ADVANCED PLACEMENT TEST SCORE - UNITED STATES GOVERNMENT AND POLITICS			
F2RAPUSH	ADVANCED PLACEMENT TEST SCORE - UNITED STATES HISTORY			APTEXAM6
F2RTR09	GRADE 9 DATA AVAILABLE			
F2RTR10	GRADE 10 DATA AVAILABLE			
F2RTR11	GRADE 11 DATA AVAILABLE			
F2RTR12	GRADE 12 DATA AVAILABLE			
F2RTROUT	TRANSCRIPT-INDICATED OUTCOME			
F2RTRPRG	TRANSCRIPT-INDICATED HIGH SCHOOL PROGRAM	ACAD_TRK		
F2RNWB1A	NEW BASICS - 4E+3SS+3S+3M+.5CS+2FL (HS&B-EQUIVALENT)			
F2RNWB2A	NEW BASICS - 4E+3SS+3S+3M+.5CS (HS&B-EQUIVALENT)			

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RNWB3A	NEW BASICS - 4E+3SS+3S+3M+2FL (HS&B-EQUIVALENT)			
F2RNWB4A	NEW BASICS - 4E+3SS+3S+3M (HS&B-EQUIVALENT)			
F2RNWB5A	NEW BASICS - 4E+3SS+2S+2M (HS&B-EQUIVALENT)			
F2RNWB1B	NEW BASICS - 4E+3SS+3S+3M+.5CS+2FL (NAEP-EQUIVALENT)	STUB2001		
F2RNWB2B	NEW BASICS - 4E+3SS+3S+3M+.5CS (NAEP-EQUIVALENT)	STUB2002		
F2RNWB3B	NEW BASICS - 4E+3SS+3S+3M+2FL (NAEP-EQUIVALENT)	STUB2003		
F2RNWB4B	NEW BASICS - 4E+3SS+3S+3M (NAEP-EQUIVALENT)	STUB2004		
F2RNWB5B	NEW BASICS - 4E+3SS+2S+2M (NAEP-EQUIVALENT)	STUB2005		
F2RHEN_C	TOTAL CARNEGIE UNITS IN ENGLISH (HS&B)			
F2RHMA_C	TOTAL CARNEGIE UNITS IN MATHEMATICS (HS&B)			
F2RHSC_C	TOTAL CARNEGIE UNITS IN SCIENCE (HS&B)			
F2RHSO_C	TOTAL CARNEGIE UNITS IN SOCIAL STUDIES (HS&B)			
F2RHCO_C	TOTAL CARNEGIE UNITS IN COMPUTER SCIENCE (HS&B)			
F2RHFO_C	TOTAL CARNEGIE UNITS IN FOREIGN LANGUAGES (HS&B)			
F2RHENG2	AVERAGE GRADE IN ENGLISH (HS&B)			
F2RHMAG2	AVERAGE GRADE IN MATHEMATICS (HS&B)			
F2RHSCG2	AVERAGE GRADE IN SCIENCE (HS&B)			
F2RHSOG2	AVERAGE GRADE IN SOCIAL STUDIES (HS&B)			
F2RENG_C	TOTAL CARNEGIE UNITS IN ENGLISH (NAEP)	STUB0100		
F2RFOR_C	TOTAL CARNEGIE UNITS IN FOREIGN LANGUAGES (NAEP)	STUB0600		
F2RMAT_C	TOTAL CARNEGIE UNITS IN MATHEMATICS (NAEP)	STUB0300		

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RAL1_C	TOTAL CARNEGIE UNITS IN ALGEBRA I (NAEP)	STUB0301		
F2RAL2_C	TOTAL CARNEGIE UNITS IN ALGEBRA II (NAEP)	STUB0302		
F2RGEO_C	TOTAL CARNEGIE UNITS IN GEOMETRY (NAEP)	STUB0303		
F2RTRI_C	TOTAL CARNEGIE UNITS IN TRIGONOMETRY (NAEP)	STUB0304		
F2RPRE_C	TOTAL CARNEGIE UNITS IN PRE-CALCULUS (NAEP)	STUB0305		
F2RCAL_C	TOTAL CARNEGIE UNITS IN CALCULUS (NAEP)	STUB0306		
F2ROMA_C	TOTAL CARNEGIE UNITS IN OTHER MATHEMATICS COURSES (NAEP)			
F2RSCI_C	TOTAL CARNEGIE UNITS IN SCIENCE (NAEP)	STUB0500		
F2REAR_C	TOTAL CARNEGIE UNITS IN EARTH SCIENCE (NAEP)			
F2RBIO_C	TOTAL CARNEGIE UNITS IN BIOLOGY (NAEP)	STUB0501		
F2RCHE_C	TOTAL CARNEGIE UNITS IN CHEMISTRY (NAEP)	STUB0503		
F2RPHY_C	TOTAL CARNEGIE UNITS IN PHYSICS (NAEP)	STUB0505		
F2ROSC_C	TOTAL CARNEGIE UNITS IN OTHER SCIENCE COURSES (NAEP)			
F2RSOC_C (NAEP)	TOTAL CARNEGIE UNITS IN SOCIAL STUDIES (NAEP)	STUB0200		
F2RHIS_C	TOTAL CARNEGIE UNITS IN HISTORY (NAEP)	STUB0210		
F2ROSO_C	TOTAL CARNEGIE UNITS IN OTHER SOCIAL STUDIES COURSES (NAEP)	STUB0220		
F2RCOM_C	TOTAL CARNEGIE UNITS IN COMPUTER SCIENCE/PROGRAMMING/DATA (NAEP)	STUB0400		
F2RVAG_C	TOTAL CARNEGIE UNITS IN AGRICULTURE (NAEP)	STUB0802		
F2RVBU_C	TOTAL CARNEGIE UNITS IN BUSINESS (NAEP)	STUB0803		

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1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RVGN_C	TOTAL CARNEGIE UNITS IN GENERAL INTRODUCTORY VOCATIONAL COURSES (NAEP)	STUB0801		
F2RVHE_C	TOTAL CARNEGIE UNITS IN HEALTH AND HUMAN RESOURCES (NAEP)	STUB0805		
F2RVHO_C	TOTAL CARNEGIE UNITS IN VOCATIONAL HOME ECONOMICS (NAEP)	STUB0806		
F2RVMA_C	TOTAL CARNEGIE UNITS IN MARKETING AND DISTRIBUTION (NAEP)	STUB0804		
F2RVTE_C	TOTAL CARNEGIE UNITS IN TECHNICAL (NAEP)	STUB0808		
F2RVTR_C	TOTAL CARNEGIE UNITS IN TRADE AND INDUSTRY (NAEP)	STUB0807		
F2R01_C - F2R56_C[5]	CSSC SUBJECT AREA SUMMARY COMPOSITES			
F2RCRLST	COURSE LISTING USED IN CODING			NOCAT

[5] These variables may appear to be comparable to COURS01 through COURS52, included on the 1982 HS&B transcript file. However, the 1992 NELS:88 items consist of counts of Carnegie units in the CSSC subject ares, while the 1982 HS&B items are counts of courses (course records), not units, in the subject areas.

COURSE-LEVEL ITEMS

1992 NELS:88 VARIABLE NAME	NELS:88 VARIABLE LABEL	NAMES OF COMPARABLE NAEP AND HS&B VARIABLES		
		1990 NAEP	1987 NAEP	1982 HS&B
F2RDIFSC	COURSE TAKEN AT SCHOOL OTHER THAN LAST ATTENDED SCHOOL	TRANSFER		
F2RYEAR	SCHOOL YEAR IN WHICH COURSE WAS TAKEN	YEARSPAN	YEARSPAN	YEAR
F2RGRLEV	GRADE LEVEL IN WHICH COURSE WAS TAKEN	GRADLEV	GRADLEV	
F2RCRSDP	DEPARTMENT OF COURSE			
F2RCRSE	COURSE TITLE	CRSENAME	CRSENAME	
F2RCRSNO	SCHOOL-ASSIGNED COURSE NUMBER			
F2RT_TYP[6]	TERM IN WHICH COURSE WAS TAKEN			
F2RCRED	SCHOOL-ASSIGNED COURSE CREDITS	RAWCRED	RAWCRED	
F2RSCRED	STANDARDIZED CREDITS, IN CARNEGIE UNITS	CRSECARN	CRSECARN	CREDIT
F2RGRADE	STANDARDIZED COURSE GRADE	STDGRAD	STDGRAD	GRADE
F2RCSSC	CSSC CODE	CRSECSSC	CRSECSSC	COURSE

[6] In the 1982 HS&B transcript study, 10 separate flags were used to indicate term type. Together, these flags are comparable to F2RT_TYP.

Listing of NCES Working Papers to Date

Please contact Ruth R. Harris at (202) 219-1831
if you are interested in any of the following papers

Number	Title	Contact
94-01 (July)	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02 (July)	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03 (July)	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04 (July)	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05 (July)	Cost-of-Education Differentials Across the States	William Fowler
94-06 (July)	Six Papers on Teachers from the 1990-91 Schools and Staffing Survey and Other Related Surveys	Dan Kasprzyk
94-07 (Nov.)	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01 (Jan.)	Schools and Staffing Survey: 1994 Papers Presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02 (Jan.)	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03 (Jan.)	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk
95-04 (Jan.)	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings

Listing of NCES Working Papers to Date--Continued

Number	Title	Contact
95-06 (Jan.)	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08 (Feb.)	CCD Adjustment to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09 (Feb.)	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10 (Feb.)	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11 (Mar.)	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12 (Mar.)	Rural Education Data User's Guide	Samuel Peng
95-13 (Mar.)	Assessing Students with Disabilities and Limited English Proficiency	James Houser
95-14 (Mar.)	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15 (Apr.)	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16 (Apr.)	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17 (May)	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
95-18 (Nov.)	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01 (Jan.)	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk

Listing of NCES Working Papers to Date--Continued

Number	Title	Contact
96-02 (Feb.)	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-03 (Feb.)	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
96-04 (Feb.)	Census Mapping Project/School District Data Book	Tai Phan
96-05 (Feb.)	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06 (Mar.)	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07 (Mar.)	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-08 (Apr.)	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-09 (Apr.)	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10 (Apr.)	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11 (June)	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk
96-12 (June)	Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey	Dan Kasprzyk
96-13 (June)	Estimation of Response Bias in the NHES:95 Adult Education Survey	Steven Kaufman
96-14 (June)	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman

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96-15 (June)	Nested Structures: District-Level Data in the Schools and Staffing Survey	Dan Kasprzyk
96-16 (June)	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
96-17 (July)	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio
96-18 (Aug.)	Assessment of Social Competence, Adaptive Behaviors, and Approaches to Learning with Young Children	Jerry West
96-19 (Oct.)	Assessment and Analysis of School-Level Expenditures	William Fowler
96-20 (Oct.)	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-21 (Oct.)	1993 National Household Education Survey (NHES:93) Questionnaires: Screener, School Readiness, and School Safety and Discipline	Kathryn Chandler
96-22 (Oct.)	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
96-23 (Oct.)	Linking Student Data to SASS: Why, When, How	Dan Kasprzyk
96-24 (Oct.)	National Assessments of Teacher Quality	Dan Kasprzyk
96-25 (Oct.)	Measures of Inservice Professional Development: Suggested Items for the 1998-1999 Schools and Staffing Survey	Dan Kasprzyk
96-26 (Nov.)	Improving the Coverage of Private Elementary-Secondary Schools	Steven Kaufman
96-27 (Nov.)	Intersurvey Consistency in NCES Private School Surveys for 1993-94	Steven Kaufman

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96-28 (Nov.)	Student Learning, Teaching Quality, and Professional Development: Theoretical Linkages, Current Measurement, and Recommendations for Future Data Collection	Mary Rollefson
96-29 (Nov.)	Undercoverage Bias in Estimates of Characteristics of Adults and 0- to 2-Year-Olds in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
96-30 (Dec.)	Comparison of Estimates from the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-01 (Feb.)	Selected Papers on Education Surveys: Papers Presented at the 1996 Meeting of the American Statistical Association	Dan Kasprzyk
97-02 (Feb.)	Telephone Coverage Bias and Recorded Interviews in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-03 (Feb.)	1991 and 1995 National Household Education Survey Questionnaires: NHES:91 Screener, NHES:91 Adult Education, NHES:95 Basic Screener, and NHES:95 Adult Education	Kathryn Chandler
97-04 (Feb.)	Design, Data Collection, Monitoring, Interview Administration Time, and Data Editing in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-05 (Feb.)	Unit and Item Response, Weighting, and Imputation Procedures in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-06 (Feb.)	Unit and Item Response, Weighting, and Imputation Procedures in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-07 (Mar.)	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-08 (Mar.)	Design, Data Collection, Interview Timing, and Data Editing in the 1995 National Household Education Survey	Kathryn Chandler

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97-09 (Apr.)	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
97-10 (Apr.)	Report of Cognitive Research on the Public and Private School Teacher Questionnaires for the Schools and Staffing Survey 1993-94 School Year	Dan Kasprzyk
97-11 (Apr.)	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-12 (Apr.)	Measuring School Reform: Recommendations for Future SASS Data Collection	Mary Rollefson
97-13 (Apr.)	Improving Data Quality in NCES: Database-to-Report Process	Susan Ahmed
97-14 (Apr.)	Optimal Choice of Periodicities for the Schools and Staffing Survey: Modeling and Analysis	Steven Kaufman
97-15 (May)	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97-16 (May)	International Education Expenditure Comparability Study: Final Report, Volume I	Shelley Burns
97-17 (May)	International Education Expenditure Comparability Study: Final Report, Volume II, Quantitative Analysis of Expenditure Comparability	Shelley Burns
97-18 (June)	Improving the Mail Return Rates of SASS Surveys: A Review of the Literature	Steven Kaufman
97-19 (June)	National Household Education Survey of 1995: Adult Education Course Coding Manual	Peter Stowe
97-20 (June)	National Household Education Survey of 1995: Adult Education Course Code Merge Files User's Guide	Peter Stowe
97-21 (June)	Statistics for Policymakers or Everything You Wanted to Know About Statistics But Thought You Could Never Understand	Susan Ahmed
97-22 (July)	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman

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97-23 (July)	Further Cognitive Research on the Schools and Staffing Survey (SASS) Teacher Listing Form	Dan Kasprzyk
97-24 (Aug.)	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
97-25 (Aug.)	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler

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